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**DEPARTMENT OF THE ENVIRONMENT**

Air and Radiation Administration  
1800 Washington Boulevard, Suite 720  
Baltimore, MD 21230

☒ Construction Permit

☐ Operating Permit

PERMIT NO. 003-1477-1-0067  
003-1477-1-0065

DATE ISSUED October 22, 2018

PERMIT FEE \$1,500.00 (Paid)

EXPIRATION DATE In accordance with  
COMAR 26.11.02.04B

**LEGAL OWNER & ADDRESS**

Maryland Crematory, LLC  
PO Box 1413  
Baltimore, Maryland 21203  
  
Attention: Ms. Dorota Marshall

**SITE**

Maryland Crematory, LLC  
408 Headquarters Dr, Ste 10  
Millersville, MD 21108  
Premises # 003-1477  
AI # 80230

**SOURCE DESCRIPTION**

Two (2) Human Crematories

US Cremation Equipment "Classic" X-Cel      003-1477-1-0067  
US Cremation Equipment "Classic"      003-1477-1-0065

This permit supersedes permit to construct 003-1477-1-0065 issued July 24, 2013.

This permit also serves as a temporary permit to operate for a period of up to 180 days after initiating operation of the US Cremation Equipment "Classic" X-Cel crematory.

This source is subject to the conditions described on the attached pages.

Page 1 of 8

Program Manager

Director, Air and Radiation Administration



**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

Crematory	Permit Number
US Cremation Equipment "Classic" X-Cel	003-1477-1-0067
US Cremation Equipment "Classic"	003-1477-1-0065

Index

Part A - Construction Conditions  
Part B - Temporary Operating Conditions  
Part C - Operating Conditions  
Part D - Monitoring and Recording  
Part E - Record Keeping and Reporting  
Part F - General Provisions  
Part G - Applicable Regulations

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**Part A - Construction Conditions**

- (1) Except as otherwise provided in this part, each crematory shall be constructed and installed in accordance with the application and specifications provided by the vendor and manufacturer.
- (2) Each crematory shall be designed to limit particulate matter emissions to no more than 0.10 grains per standard cubic foot dry, adjusted to 12 percent carbon dioxide.
- (3) Each crematory shall be equipped with a secondary combustion chamber having the following retention times and minimum operating temperatures:

Crematory	Retention time (seconds)	Operating Temperature (Fahrenheit)
"Classic" X-Cel	2.0	1800
"Classic"	1.5	1800

- (4) Each crematory shall be equipped with a temperature chart recorder and temperature sensor located near the flue gas exit of the secondary combustion chamber to continuously monitor and record the temperature of the flue gases leaving the secondary combustion chamber.
- (5) In order to minimize odors and ground level air pollution, each crematory stack shall vent exhaust gases straight up without restriction or obstruction. If a rain cap is installed, it shall be designed to automatically open when the unit is operating, so as to not obstruct the upward flow of the exhaust gasses in any manner.
- (6) Each crematory stack shall discharge at least 27 feet above the ground and at least 11 feet above the roof peak.

**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

**Part B - Temporary Operating Conditions**

- (1) These temporary operating conditions apply only to the "Classic" X-CEL crematory.
- (2) This permit to construct shall also serve as a temporary permit to operate that grants the Permittee the right to operate the crematory for a period of up to 180 days after initial operation of the crematory.
- (3) During the period of the temporary permit to operate the Permittee shall operate the crematory in accordance with this permit to construct and in accordance with the operating instructions as provided by the equipment manufacturer and vendor.
- (4) At least 10 days prior to the initial operation of the crematory, the Permittee shall notify the Department in writing of the anticipated date of initial operation.
- (5) No later than 15 days after the initial operation of the crematory, the Permittee shall notify the Department in writing of the actual date of start-up.
- (6) The Permittee shall submit an application for a state permit to operate no later than 60 days prior to the expiration of this temporary permit to operate.

**Part C - Operating Conditions**

- (1) The Permittee shall abide by the following premises wide operational limitations:
  - (a) Shall not combust any halogenated plastics, including polyvinyl chloride (PVC) body bags or PVC pipes;
  - (b) Shall not combust any hazardous waste, or hospital, medical, and infectious waste as defined in COMAR 26.11.08.01B(18); and,
  - (c) Shall not cremate more than 10 remains during any 8 hour period.
- (2) The Permittee shall maintain and operate the crematory and all associated air pollution control equipment so as to assure full and continuous compliance with all applicable air pollution control regulations and permit conditions.
- (3) The Permittee shall maintain, calibrate, and operate all control panel instrumentation and equipment used to monitor the performance of the crematory and the secondary chamber.
- (4) Prior to the initiation of the cremation in the primary chamber, the secondary chamber shall be preheated until the gases leaving the secondary chamber attain a temperature of at least 1800 degrees F.
- (5) While remains are being cremated, the secondary chamber temperature set point shall be at least 1800 degrees F or higher.

**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

**Part D - Monitoring and Recording**

- (1) The chart recorder shall be turned on and recording at the initiation of preheating the secondary chamber in order to document that the secondary chamber achieves a temperature of 1800 degrees F. prior to beginning each cremation.
- (2) While remains are being cremated, the temperature of the flue gases from the secondary chamber shall be continuously recorded on a chart recorder.
- (3) The chart recorder paper shall be replaced as necessary in order to ensure there is no overlapping of any portion of the recording of cremation cycles.

**Part E - Record Keeping and Reporting**

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
  - (a) Chart recordings for each crematory that clearly show the following information;
    - (i) The identity of the crematory being recorded;
    - (ii) The flue gas temperature at the outlet of the secondary chamber; and,
    - (iii) The date and start time of each and every cremation shown on the chart.
  - (b) A daily log that clearly shows the following information:
    - (i) The date and start time of each and every cremation;
    - (ii) The identity of the crematory used for each and every cremation,
    - (iii) The approximate weight of the charge for each and every cremation; and,
    - (iv) The duration of each and every cremation.
- (2) The Permittee shall maintain at the facility for at least five (5) years records necessary to support annual certifications of emissions and demonstrations of compliance for toxic air pollutants. Such records shall include, if applicable, the following:
  - (a) Mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each registered source of emissions;
  - (b) Accounts of the methods and assumptions used to quantify emissions;
  - (c) All operating data, including operating schedules and production data, that were used in determinations of emissions;
  - (d) Amounts, types, and analyses of all fuels used;

**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

- (e) Any records, the maintenance of which is required by this permit or by State or federal regulations, that pertain to the operation and maintenance of continuous emissions monitors, including:
    - (i) all emissions data generated by such monitors;
    - (ii) all monitor calibration data;
    - (iii) information regarding the percentage of time each monitor was available for proper service; and
    - (iv) information concerning any equipment malfunctions.
  - (f) Information concerning operation, maintenance, and performance of air pollution control equipment and compliance monitoring equipment, including:
    - (i) identifications and descriptions of all such equipment;
    - (ii) operating schedules for each item of such equipment;
    - (iii) accounts of any significant maintenance performed;
    - (iv) accounts of all malfunctions and outages; and
    - (v) accounts of any episodes of reduced efficiency.
  - (g) Limitations on source operation or any work practice standards that significantly affect emissions; and
  - (h) other relevant information as required by the Department.
- (3) The Permittee shall submit to the Department by April 1 of each year during the term of this permit a certification of emissions for the previous calendar year. The certifications shall be prepared in accordance with requirements adopted under COMAR 26.11.02.19D.
- (a) Certifications of emissions shall be submitted on forms obtained from the Department.
  - (b) A certification of emissions shall include mass emissions rates for each regulated pollutant, and the total mass emissions rate for all regulated pollutants for each of the Permittee's registered sources of emissions.
  - (c) The person responsible for a certification of emissions shall certify the submittal to the Department in the following manner:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

- (4) The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. Such analysis shall include either:
- (a) A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
  - (b) A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.
- (5) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07C, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.

**Part F - General Provisions**

- (1) The following applications are incorporated by reference into this permit:
- (a) Initial Application for Incinerators (AMA-10) received August 22, 2017;
  - (b) A Toxic Air Pollutant Analysis received January 22, 2018 and,
  - (c) Other documents as received.
- If there are any discrepancies between the permit and the application, the conditions on this permit will take precedence. In the application, estimates of dimensions, volumes, emission rates, operating rates, feed rates and hours of operation are not deemed to constitute enforceable numeric limits except to the extent that they are necessary to make a determination of compliance with applicable regulations.
- (2) Inspectors from the Department and the Anne Arundel County Health Department shall be afforded access to the Permittee's property at any reasonable time for:
- (a) inspecting construction authorized under this permit;
  - (b) sampling any materials stored or processed on site, or any waste or discharge into the environment to determine compliance with the permit;
  - (c) inspecting any monitoring equipment required by the permit;
  - (d) having access to or copying any records relevant to the Department's determination of compliance with an air pollution control requirement including all documents required to be kept by this permit; and
  - (e) obtaining any photographic documentation and evidence to determine compliance with the permit.
- (3) This permit expires if substantial construction has not commenced within 18 months after the issue date of this permit, or if construction is substantially discontinued for a period of 18 months after the construction has commenced, or if construction is not completed within a reasonable period of time.
- (4) Prior to any increase in the quantities and/or change in the types of materials stated in the application or limited by the permit, notification shall be provided to the Department. If the Department determines that

**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

the change constitutes a modification, the Permittee shall obtain a Permit to Construct prior to the modification.

- (5) Nothing in this permit authorizes the violation of any rule or regulation nor the creation of a nuisance or air pollution.
- (6) If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect, and such invalid provisions shall be considered severed and deleted from the permit.
- (7) This permit supersedes permit to construct 003-1477-1-0065 issued on July 24, 2013.
- (8) Subsequent to issuance of this permit, the Department may impose additional and modified requirements that are incorporated into a state permit to operate issued pursuant to COMAR 26.11.02.13

**Part G - Applicable Regulations**

- (1) This source is subject to all applicable Federal and local requirements.
- (2) This source is subject to all applicable federally enforceable air pollution control requirements including, but not limited to, the following regulations:
  - (a) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.
  - (b) COMAR 26.11.02.09A, which requires that the Permittee obtain a permit-to-construct if an installation is to be modified in manner that causes a change in the quantity, nature, or characteristics of emissions referenced in the permit-to-construct issued for that installation.
  - (c) COMAR 26.11.02.19C, which requires that the Permittee maintain records necessary to support the emission certification.
  - (d) COMAR 26.11.08.04B which prohibits emissions visible to human observers, other than water in an uncombined form.
  - (e) COMAR 26.11.08.04C which provides exceptions to the visible regulations during start-up, or adjustments or occasional cleaning of control equipment if the visible emissions are not greater than 40 percent opacity, and the visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period.
  - (f) COMAR 26.11.08.05A&B which limits particulate matter emissions to 0.10 grains per standard cubic foot of dry gas, corrected to 12 percent carbon dioxide.
- (3) This source is subject to all applicable state-only air pollution control requirements including, but not limited to, the following regulations:
  - (a) COMAR 26.11.02.13A(1), which requires that the Permittee maintain and renew as required a valid State permit-to-operate issued by the Department.
  - (b) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in the submittals.



**MARYLAND CREMATORY, LLC**  
**PERMIT TO CONSTRUCT CONDITIONS**

- (c) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (d) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.
- (e) COMAR 26.11.15.06 which prohibits the discharge of toxic air pollutants to the extent that the emissions endanger human health.

